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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,348	04/19/2001	Randall W. Ojanen	K-1786	2490

7590 07/26/2004  
Kennametal Inc.  
P.O. Box 231  
Latrobe, PA 15650

EXAMINER

SINGH, SUNIL


ART UNIT PAPER NUMBER

3673

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
09/838,348	OJANEN	
Examiner	Art Unit	
Sunil Singh	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-17, 29, 30, 32-40 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-17, 29-30, 32-40, 43-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____  | 6) <input type="checkbox"/> Other: ____                                     |

**DETAILED ACTION*****Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-17, 29-30, 32-40, 43-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant in the specification pages 10-11 explicitly states that the prior art in particular Emmerich '783 and Engle et al. '309 both teach protruding surfaces that are spring loaded so as to expand into the notch of a bore. Page 11 goes on to state that debris and dirt interferes with the inward radial play of the radial protruding surfaces making the tools very difficult and sometimes impossible to remove. Applicant then states that his protruding dimples are designed to require **no radial play**. It is the examiner's position that such a statement of the protruding dimples not requiring radial play is incorrect. In order for the sleeve (40) with dimples (46) to be inserted into bore 20 and then have the dimples snap into notch 38 there **must be some radial play**. Such radial play might not be to the extent of the prior art; nevertheless there must be some radial play; otherwise, the sleeve would be an interference fit with the bore and this is clearly not the case because the sleeve has slit (42). For example look at Figure 12, in order for dimple (46) to snap into

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**notch (38) it would have to pass through a narrower inner sleeve diameter prior to getting to the notch therefore there must be some degree of radial play.** Based on these discrepancies, one skilled in the art cannot make and/or use the invention as claimed.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 39,40 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kniff or Oaks et al. or Rettkowski or Sulosky et al. or Sollami (US 3512838, 3752515, 4247147, 5536073, 600153).

Kniff, Oaks et al., Rettkowski, Sulosky et al. or Sollami all disclose the invention substantially as claimed. However, they all do not explicitly disclose the thickness ratio between the outwardly protruding surface and the sleeve. It would have been obvious matter of design choice to modify Kniff or Oaks et al. or Rettkowski or Sulosky et al. or Sollami by having the thickness ratio between the outwardly protruding surface and the sleeve be 15-30%, since applicant has not disclosed that having the specific percentage solves any stated problem or is for any particular purpose and it appears that a thickness ratio of 14% or 31% would perform equally well. Furthermore, such a modification is obvious to one skilled

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in the art since this allows for less crimping of the sleeve when installing in the bore of the block.

5. Claims 15-17, 29-30, 32-40, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engle et al. or Radd et al. or Kniff et al. or Emmerich or Dziak, Beach et al. or Beach or Montgomery, Jr. (US 3519309, 3801158, 3841708, 4484783, 4489986, 4850649, 5645323, 5730502)

Engle et al. , Radd et al., Kniff et al., Emmerich, Dziak, Beach et al., Beach, Montgomery, Jr all disclose the invention substantially as claimed. However, they all do not explicitly disclose the thickness ratio between the outwardly protruding surface and the sleeve. It would have been obvious matter of design choice to modify Engle et al. or Radd et al. or Kniff et al. or Emmerich or Dziak, Beach et al. or Beach or Montgomery, Jr by having the thickness ratio between the outwardly protruding surface and the sleeve be 15-30%, since applicant has not disclosed that having the specific percentage solves any stated problem or is for any particular purpose and it appears that a thickness ratio of 14% or 31% would perform equally well. Furthermore, such a modification is obvious to one skilled in the art since this allows for less crimping of the sleeve when installing in the bore of the block.

With regards to claims 33-33, 36-37, 44-45, it would have been obvious matter of design choice to modify Engle et al. or Radd et al. or Kniff et al. or Emmerich or Dziak, Beach et al. or Beach or Montgomery, Jr by having his dimples within the range called for in the above mentioned claims, since

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applicant has not disclosed that having the specific ranges solves any stated problem and it appears that the sleeve would perform equally well with the dimples being .006, .021 or .05 or .11 inches thick.

***Response to Arguments***

6. Applicant's arguments filed 5/10/2004 have been fully considered but they are not persuasive. Applicant argues that . Kniff, Oaks et al., Rettkowski, Sulosky et al., Sollami (US 3512838, 3752515, 4247147, 5536073, 600153), Engle et al., Radd et al., Kniff et al., Emmerich, Dziak, Beach et al., Beach and Montgomery, Jr. (US 3519309, 3801158, 3841708, 4484783, 4489986, 4850649, 5645323, 5730502) all require inward radial play since their dimples are not about 15-30 percent of the thickness of the retainer. Applicant then further states that because his dimples are within the 15-30 percent range it does not require inward radial play for its removal. It is the examiner's position that such a statement of the protruding dimples not requiring radial play is incorrect. In order for the sleeve (40) with dimples (46) to be inserted into bore 20 and then have the dimples snap into notch 38 there **must be some radial play. Such radial play might not be to the extent of the prior art; nevertheless there must be some radial play; otherwise, the sleeve would be an interference fit with the bore and this is clearly not the case because the sleeve has slit (42). For example look at Figure 12, in order for dimple (46) to snap into notch (38) it would have to pass through a narrower inner sleeve diameter prior to getting to the notch therefore there must be some degree of radial play.**

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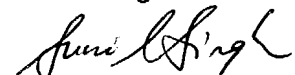
**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (703) 308-4024. The examiner can normally be reached on Monday through Friday 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh



Patent Examiner  
Art Unit 3673

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7/21/2004